

ABSTRACT OF THE DISCLOSURE

A band-pass filter has a ladder-type circuit including first and second terminals whose characteristic impedances are Z_0 , and
5 series elements and shunt elements disposed between a first terminal and a second terminal, each of the series elements and shunt elements containing a film bulk acoustic resonator. Assuming that characteristic impedance of any one of the series elements is Z_1 and that characteristic impedance of any one of the shunt elements is Z_2 ,
10 the characteristic impedances Z_0 , Z_1 , and Z_2 have a relation of $1 < (Z_1/Z_0) < 2$, preferably $1.3 < (Z_1/Z_0) < 1.7$, and $0.5 < (Z_2/Z_0) < 1$, preferably $0.6 < (Z_2/Z_0) < 0.8$.